

A compound for inserting into an organism, comprising: the compound having a disulfide bond that is labile under physiologic conditions consisting of (a) a disulfide bond that is cleaved more rapidly than oxidized glutathione and (b) a disulfide bond constructed from thiols in which one of the constituent thiols has a lower pKa than glutathione and (c) a disulfide bond that is activated by intramolecular attack from a free thiol thereby forming two molecules derived from the compound.

- 8) (Amended) [The compound of claim 7 wherein the compound comprises an amphipathic molecule.]

The compound of claim 7 wherein the compound is amphipathic.

- 12) (Amended) [A process for forming a compound having a labile disulfide bond for use with an organism, comprising:
- a) forming the compound having a disulfide bond selected from the group consisting of (i) a disulfide bond that is cleaved more rapidly than oxidized glutathione, and (ii) a disulfide bond constructed from thiols in which one of the constituent thiols has a lower pKa than glutathione, and (iii) a disulfide bond that is activated by intramolecular attack from a free thiol thereby forming two molecules;
 - b) inserting the compound into the organism.]

A process for forming a compound having a labile disulfide bond for use with an organism, comprising:

- a) forming the compound having a disulfide bond consisting of (i) a disulfide bond that is cleaved more rapidly than oxidized glutathione, and (ii) a disulfide bond constructed from thiols in which one of the constituent thiols has a lower pKa than glutathione, and (iii) a disulfide bond that is activated by intramolecular attack from a free thiol thereby forming two molecules derived from the compound;
 - b) inserting the compound into the organism.
- 18) (Amended) [The process of claim 12 wherein the disulfide-containing molecule is a bifunctional molecule.]

The process of claim 12 wherein the compound is bifunctional.

A clean version of each replacement claim is submitted below. Please enter each claim.

- 7) (Amended) A compound for inserting into an organism, comprising: the compound having a disulfide bond that is labile under physiologic conditions consisting of (a) a disulfide bond that is cleaved more rapidly than oxidized glutathione and (b) a disulfide bond constructed from thiols in which one of the constituent thiols has a lower pKa than glutathione and (c) a disulfide bond that is activated by intramolecular attack from a free thiol thereby forming two molecules derived from the compound.